

ABSTRACT OF THE DISCLOSURE

A Common Rail injection system of an endothermic engine, the injection system including at least one fuel pressure accumulating tank, of the rail type, having an input in fluid communication with a high-pressure pump and a plurality of outputs for feeding corresponding injectors by using pressure regulating means connected and depending on an electronic control unit. Advantageously a virtual pressure sensor includes a fluid-dynamic model of the accumulating tank suitable to estimate and to obtain fluid pressure values used by the electronic control unit for driving the injection means of the Common Rail injection system.

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